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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,367	12/30/2003	John E. Maloney	TPI-0604	7782

23377 7590 06/06/2006
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EXAMINER

STEIN, JULIE E

ART UNIT PAPER NUMBER

2617

DATE MAILED: 06/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/748,367

Applicant(s)

MALONEY ET AL.

Examiner

Julie E. Stein, Esq.

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

1. The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2617.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-3, 7, 9-12, 16, and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over "The Qualcomm/SnapTrack Wireless-Assisted GPS Hybrid Positioning System and Results from Initial Commercial Deployments" to Z. Biacs et al. in view of U.S. Patent Application Publication No. 2004/0203853 to Sheynblat.

Biacs teaches all the steps/elements of independent claims 1 and 11, including a method and system for the determination of the location of a mobile station (MS) (abstract) equipped with embedded GPS signal reception capability (Abstract) and equipped to operate within a wireless communications network (Abstract, terrestrial/cellular), the method/system comprising: (a) receiving GPS data (Introduction), said GPS data being received from a MS to be located (Introduction); (b) receiving a communications-band signal from said MS to be located (Introduction) and using the location-measurement facilities to extract location-related characteristic data from the communications-band signal (Terrestrial Measurements); and (c) performing location-determination calculation using the GPS data and the extracted location-related characteristic data to derive an estimated location for the MS (Position Estimation).

However, Biacs does not explicitly teach receiving the GPS data at a land station, receiving a communications-band signal at a land station equipped with location-measurement facilities, or performing location-determination calculation at a land station equipped for location-determination calculations. But, Biacs does teach that the GPS and communications-band signal are received by a PDE. In addition, Sheynblat teaches in the same field of invention, a hybrid location system, that a location server, such as a PDE can be a base station thus a ground station. See paragraph 31.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify Biacs such that the PDE is located at a base station as taught by Sheynblat because as shown in Biacs in Figures and 1 and 2, the

PDE/LCS are computers/servers and Sheynblat teaches that these servers can be located in base stations.

Biacs in view of Sheynblat teach all the steps/elements of claims 2 and 20, including providing assistance data to the MS to be located, said assistance data enhancing the ability of the MS to receive GPS signals and extract TOA or pseudorange measures, wherein said TOA or pseudorange measures are then communicated to the said land station equipped with location-measurement facilities. See, Sheynblat, paragraphs 31 to 32.

Biacs in view of Sheynblat teach all the steps/elements of claims 3 and 12, including communicating the GPS data and the extracted location-related characteristic data to said land station equipped for location-determination calculations. See, Biacs System Overview.

Biacs in view of Sheynblat teach all the steps/elements of claims 7 and 16, including wherein said location-related characteristic data extracted from the communications-band signal includes data concerning signal strength or propagation loss. See Sheynblat paragraph 24.

Biacs in view of Sheynblat teach all the steps/elements of claims 9 and 18, including using collateral information in performing said location-determination calculations. See, Sheynblat paragraph 31, the almanac information.

Biacs in view of Sheynblat teach all the steps/elements of claims 10 and 19, including wherein said method is employed to achieve applicable FCC accuracy requirements for E-911. See, Biacs Abstract.

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5. Claims 4-6, 8, 13-15, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Biacs in view of Sheynblat as applied to claims 1 and 11 above, and further in view of U.S. Patent Application No. 2005/0012611 to Osman.

Biacs in view of Sheynblat teach all the steps/elements of claims 4-6, 8, 13-15, and 17, except wherein said location-related characteristic data extracted from the communications-band signal includes TOA, TDOA, AOA, or TA data. But, Sheynblat does teaches that well known trilateration techniques could be used in hybrid locating systems by a PDE to locate a user terminal. See paragraph 32. In addition, Osman teaches that the above trilateration techniques are well known in the art as ways of location a user terminal in a cellular network. See paragraph 8. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify Biacs in view of Sheynblat to use any of the above well known trilateration cellular techniques in a hybrid location system with GPS because the techniques are well known in the art as taught by Osman and Sheynblat teaches that such trilateration techniques can be used hybrid location system.

Response to Arguments

6. Applicant's arguments filed March 20, 2006 have been fully considered but they are not persuasive.

7. The declaration filed on March 20, 2006 under 37 CFR 1.131 has been considered but is ineffective to overcome the Biacs reference.

8. According to 37 CFR 1.131, all the inventors of the claimed subject matter must make the declaration. See MPEP 715.04. However, the submitted declaration is

signed by only one of the co-inventors of the present invention, and yet declares in paragraph 4 to apply to all the pending claims (1-20) and in paragraph 5 to apply to both the co-inventor (who, although not specifically named in the declaration, the Examiner can only assume is suppose to be John Maloney) and to the signer, Robert Anderson.

9. The evidence submitted is insufficient to establish a conception date of the invention prior to the effective date of the Biacs reference. While conception is the mental part of the inventive act, it must be capable of proof, such as by demonstrative evidence or by a complete disclosure to another. Conception is more than a vague idea of how to solve a problem. The requisite means themselves and their interaction must also be comprehended. See *Mergenthaler v. Scudder*, 1897 C.D. 724, 81 O.G. 1417 (D.C. Cir. 1897). The evidence submitted to prove conception is the TruePosition Proposal. The TruePosition Proposal does not indicate who wrote the proposal. Nor does the declaration identify where in the TruePosition Proposal there is support for the claimed subject matter. Furthermore, as clearly indicated in MPEP 715.07, simply stating that one has invented the subject matter of the claims without further evidence is nothing more than the equivalent of "mere pleading". Therefore, the Examiner finds insufficient evidence of a conception date earlier than the constructive reduction to practice date of Applicant's filing date, December 30, 2003.

10. The evidence submitted is insufficient to establish diligence from a date prior to the date of reduction to practice of the Biacs reference to either a constructive reduction to practice or an actual reduction to practice. The evidence submitted to prove diligence is the TruePosition Proposal and a statement in the declaration that diligence was

performed. The TruePosition Proposal does not indicate any dates except a copyright of 2003. In addition, the declaration only indicates, that “we worked diligently” from a date prior to the Biacs reference to the date that the constructive reduction to practice occurred--the filing date of the current patent application, December 30, 2003. As diligence is a very high standard that requires a clear showing of what was done and when it was done (see MPEP 715.07(a) and 2138.06), the Examiner finds that there is insufficient evidence of diligence.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie E. Stein, Esq. whose telephone number is (571) 272-7897. The examiner can normally be reached on M-F (8:30 am-5:00 pm).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JES



CHARLES APPIAH
PRIMARY EXAMINER